REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejection and further examination is hereby requested.

The specification and abstract have been reviewed and revised to make a number of editorial revisions thereto. The amendments to the specification and abstract have been incorporated into a substitute specification and abstract. Attached are two versions of the substitute specification and abstract, a marked-up version showing the revisions, as well as a clean version. No new matter has been added.

Claims 1-8 have been cancelled without prejudice or disclaimer to the subject matter contained therein and replaced by new Claims 9-14.

Claims 1-2 were rejected under 35 U.S.C. §101 because the claimed invention was alleged to be drawn to non-statutory subject matter. This rejection is considered moot on the basis that original Claims 1-2 are cancelled, wherein the subject matter of original Claims 1-2 is not recited in new Claims 9-14.

Claims 1, and 3-5 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite in regards to the phrase "reconfigurable operating system usable as a combination of only necessary functional portions." This rejection is considered moot based on the cancellation of original Claims 1, and 3-5, and inapplicable because new Claims 9-14 do not recite "reconfigurable operating system usable as a combination of only necessary functional portions."

Claims 1-2 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the applicants admitted prior art. This rejection is considered moot based on the cancellation of original Claims 1-2, wherein the subject matter of original Claims 1-2 is not recited in new Claims 9-14.

Claims 3-5 were rejected under 35 U.S.C. § 103(a) as being unpatentable over applicants admitted prior art (Japanese Unexamined Patent Application Publication Number 2001-318716, entitled TEST DEVICE FOR PLANT CONTROLLER) in view of Donne et al (Application of Modern Methods in Power Plant Simulation and Control, Computing & Control Engineering Journal, April 2001) (Donne). Further, Claims 6-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the applicants admitted prior art in vew of Donne, and further in view of

Kruger et al U.S. Patent 6,473,480 B1 (Kruger). These rejections are believed clearly inapplicable to the present claims for the following reasons.

New Claims 9, 11, and 13, are Patentable Over the Admitted Prior Art in View of Donne

New independent Claims 9, 11, and 13 recite a simulation-verification apparatus including, in part, (1) a controller-simulator computer which executes control logic and outputs a control command signal according to an operating status of the control logic; and (2) a plant model-simulator computer which, according to execution of plant model logic, simulates an action status of a plant upon receipt of the control command signal output from said controller-simulator computer.

Simply stated, new Claims 9, 11, and 13 include a controller-simulator computer and a plant model-simulator computer which communicate with each other, wherein the controller-simulator computer executes control logic and the plant model-simulator executes plant model logic and information from the control logic is communicated between the controller-simulator computer and plant model-simulator computer.

In contrast, the admitted prior art specifies an actual gas turbine controller 11 being connected to a plant simulator 24. More specifically, the plant simulator 24 executes software developed by mathematical modeling for the purpose of performing a function test on the actual gas turbine controller 11.

Moreover, Donne merely teaches the simultaneous simulation of a combined heat and power plant, and the controller of the combined heat and power plant on a single simulation computer (page 82, Fig. 13, and second paragraph).

Based on the above discussion, it is apparent the admitted prior art teaches communication between an actual gas turbine controller and a plant simulator. Moreover it is apparent that Donne teaches the simulation of a heat and power plant, and the controller of the heat and power plant on a single computer. On the other hand, new independent Claims 9, 11, and 13 recite the simulation of control logic on a controller-simulator computer running a specific operating system, and the simulation of plant model logic on a plant model-simulator running an identical, yet separate, operating system. As a result, the simulation of control logic

and plant model logic on separate distinct computers, with separate operating systems is not disclosed or suggested by the admitted prior art or Donne. Moreover, the combination of the plant simulator feature of the admitted prior art, and the heat and power plant simulator and the controller simulator features of Donne do not teach, suggest, or facilitate the modeling of plant model logic and controller logic on two separate and distinct computers which communicate to each other for sending information regarding the simulations.

In light of the numerous features recited in new independent Claims 9, 11, and 13 that are lacking in the combination of the features of the admitted prior art and Donne, it is apparent that new independent Claims 9, 11, and 13 as well as new dependent Claims 10, 12, and 14 are patentable over the admitted prior art in view of Donne.

New Independent Claims 9, 11, and 13 are Patentable Over the Admitted Prior Art in View of Donne and Kruger.

The features of new independent Claims 9, 11, and 13, as well as the teachings of the admitted prior art and Donne are described above.

Moreover, Kruger teaches the utilization of a Linux operating system for executing a non-steady state computer model of water in a Boiling Water Reactor.

Based on the discussion above, it is apparent that the combination of features taught by the admitted prior art in view of Donne and Kruger do not teach or suggest the modeling of plant model logic and controller logic on two separate and distinct computers which communicate to each other for sending information regarding the simulations. The feature taught by Kruger merely teaches the inclusion of a Linux operating system to execute the simulations. The addition of such an operating system does not teach or suggest the above-discussed features of new independent Claims 9, 11, and 13.

In light of the features recited in new independent Claims 9, 11, and 13 that are lacking in the combination of the admitted prior art, Donne, and Kruger, it is apparent that new independent Claims 9, 11, and 13 as well as new dependent Claims 10, 12, and 14 are patentable over the admitted prior art in view of Donne and Kruger.

Because of the above-mentioned distinctions, it is clear that new Claims 9-14 are not unpatentable over the admitted prior art in view of Donne and/or Kruger. Specifically, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to modify the admitted prior art to make any combination of the references of record in such a manner as to result in or otherwise render obvious, the present invention as recited in new Claims 9-14. Therefore, it is submitted that new Claims 9-14 are clearly allowable over the prior art of record.

Respectfully submitted,

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